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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,102	10/28/2003	Mark E. Tuttle	M140-363	6610

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EXAMINER	
ZIMMERMAN, BRIAN A	

ART UNIT	PAPER NUMBER
2612	

DATE MAILED: 09/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/696,102	TUTTLE ET AL.	
	Examiner	Art Unit	
	Brian A. Zimmerman	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 July 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-53* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-53* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *7/14/06*.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

Status of Application

In response to the applicant's amendment received on 7/14/06. The examiner has considered the new presentation of claims and applicant arguments in view of the disclosure and the present state of the prior art. And it is the examiner's position that claims 1-53 are unpatentable for the reasons set forth in this office action:

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1,2,5,8,9,12 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6781508. Although the conflicting claims are not identical, they are

not patentably distinct from each other because the pending claims are broader than the patented claims. It has been well held that broader pending claims are obvious in view of narrower patented claim. It is the examiner's position that the term "reconfigurably adjusting" reads on the laser trimming of the antenna claimed in the patent in that the laser-trimmed antenna has been reconfigured to tune the antenna circuits.

Claims 1,2,5,8,9,12 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6466131. Although the conflicting claims are not identical, they are not patentably distinct from each other because the pending claims are broader than the patented claims. It has been well held that broader pending claims are obvious in view of narrower patented claim. It is the examiner's position that the term "reconfigurably adjusting" reads on the laser trimming of the antenna claimed in the patent in that the laser-trimmed antenna has been reconfigured to tune the antenna circuits.

Claims 1,2,5,8,9,12 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 4 of U.S. Patent No. 6509837. Although the conflicting claims are not identical, they are not patentably distinct from each other because the pending claims are broader than the patented claims. It has been well held that broader pending claims are obvious in view of narrower patented claim. It is the examiner's position that the term "reconfigurably adjusting" reads on the laser trimming of

the antenna claimed in the patent in that the laser-trimmed antenna has been reconfigured to tune the antenna circuits.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1,2,4,5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murray (5086290) and Markowitz (5626630) and Hogen Esch (5103222).

Markowitz shows a transponder configured and tuned and shaped to receive an interrogation signal. Each transponder is uniquely configured. See col. 4 lines 40-45. Markowitz limits the frequency sensitivity of the transponders to values that prevent collision of responses and interrogation signals. Markowitz shows the data communication device includes a transponder 17 (which includes a receiver to receive interrogation signals and a transmitter to reply in response to the interrogation, transceiver 18). Markowitz shows the transponder and a microstrip antenna to be enclosed within a housing and in an IC, see col. 4 lines 29+. Markowitz also shows a power supply within the transponder (figure 5a) see

also col. 4 lines 62+. Markowitz shows the package to encapsulate the antenna (col. 4 lines 29+). Markowitz shows tuning the receiver circuit (col. 4 lines 40).

In analogous art, Murray suggests limiting a receiver's range to provide flexibility of a variety of ranges. See col. 1 lines 60-65. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized a range limiting element in the above modified system for provide flexibility. The use of such concepts in a passive transponder (as modified above) would control the ability to hear the wake up signal, thus controlling the operation range of the transponder. Although Murray discusses the tuning of a receiving circuit, it is well known in the art that transmitter circuits are tuned (or detuned) in the same manner as receiving circuits and such would affect the operating range of the transmitting circuit.

The examiner has previously take official notice that "it is well known in the art that transmitter circuits are tuned (or detuned) in the same manner as receiving circuits." In an analogous art, Hogen Esch teaches that transmitter circuits are tuned (or detuned) in the same manner as receiving circuits, see col. 1 lines 10-30. therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have tuned the transmitter of the above system in the same manner as the receiver is suggested since this would be an alternative method of tuning to reach desired sensitivity in the communication channel.

2. Claims 8,9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murray (5086290) and Markowitz (5626630).

Markowitz shows a transponder configured and tuned and shaped to receive an interrogation signal. Each transponder is uniquely configured. See col. 4 lines 40-45. Markowitz limits the frequency sensitivity of the transponders to values that prevent collision of responses and interrogation signals. Markowitz shows the data communication device includes a transponder 17 (which includes a receiver to receive interrogation signals and a transmitter to reply in response to the interrogation, transceiver 18). Markowitz shows the transponder and a microstrip antenna to be enclosed within a housing and in an IC, see col. 4 lines 29+. Markowitz also shows a power supply within the transponder (figure 5a) see also col. 4 lines 62+. Markowitz shows the package to encapsulate the antenna (col. 4 lines 29+). Markowitz shows tuning the receiver circuit (col. 4 lines 40).

In analogous art, Murray suggests limiting a receiver's range to provide flexibility of a variety of ranges. See col. 1 lines 60-65. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized a range limiting element in the above modified system for provide flexibility. The use of such concepts in a passive transponder (as modified above) would control the ability to hear the wake up signal, thus controlling the operation range of the transponder. Although Murray discusses the tuning of a receiving circuit, it is well known in the art that transmitter circuits are tuned (or detuned) in the same manner as receiving circuits and such would affect the operating range of the transmitting circuit.

3. Claims 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murray and Markowitz as applied to claim 8 above, and further in view of Hogen Esch.

The examiner has previously take official notice that "it is well known in the art that transmitter circuits are tuned (or detuned) in the same manner as receiving circuits." In an analogous art, Hogen Esch teaches that transmitter circuits are tuned (or detuned) in the same manner as receiving circuits, see col. 1 lines 10-30. therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have tuned the transmitter of the above system in the same manner as the receiver is suggested since this would be an alternative method of tuning to reach desired sensitivity in the communication channel.

4. Claims 3,6,13,15-21,26-28,34-41,46-48,51-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murray, Markowitz and Hogen Esch as applied to claims 1,2,5,8,1 and 12 above, and further in view of Schuerman (5491484).

In an analogous art, Schuerman shows a transponder that includes fixed circuit elements 240 that switched in and out rearrangably using switch 244, to tune and adjust the transponder. The control of the switching is done in response from a signal from the interrogator. See col. 5 lines 22-53. This provides a tuning mechanism that can be altered over and over again in

response to the interrogation signal. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used the switch controlled fixed circuit elements as tuning elements in the above modified system since this would improve the ability to provide multiple changes to the tuning of the circuit in response to signals received from the interrogator.

5. Claims 10,22-25,29-33,42-45,49,50 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murray, and Markowitz as applied to claims 8 and 9 above, and further in view of Schuerman (5491484).

In an analogous art, Schuerman shows a transponder that includes fixed circuit elements 240 that switched in and out rearrangably using switch 244, to tune and adjust the transponder. The control of the switching is done in response from a signal from the interrogator. See col. 5 lines 22-53. This provides a tuning mechanism that can be altered over and over again in response to the interrogation signal. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used the switch controlled fixed circuit elements as tuning elements in the above modified system since this would improve the ability to provide multiple changes to the tuning of the circuit in response to signals received from the interrogator.

Response to Arguments

Applicant's arguments filed 7/14/06 have been fully considered but they are not persuasive.

The applicant argues that, regarding the double patenting rejection, selective tuning circuitry within a range of tuned and detuned states to realize a desired sensitivity is substantially different from laser trimming. The applicant has not specifically pointed out how these are deferent. It remains the examiner's position that since the designer of the tag, in the claimed invention of the patent, would choose to trim the antenna in accordance with the patented claims, this choice would make the timing selective since the user selected to trim the antenna. The trimming of the antenna (as claimed in the patent) tunes the tag within a range of tuned and detuned states because reducing the sensitivity meets the limitation in the present claims.

The applicant argues that neither Markowitz nor Murray disclose at least one of the antenna and the transmitter having reconfigurable electrical characteristics. It is noted that this argument does not cover all the claims that the applicant addresses, for example claims 8 and 9 do not claim that the antenna or the transmitter are adjusted. Markowitz shows a transponder configured and tuned and shaped to receive an interrogation signal. The applicant appears to be correct in that Markowitz only teaches adjusting the receiver circuit. However, the examiner had previously take official notice that "it is well known in the art that transmitter circuits are tuned (or detuned) in the same manner as receiving circuits." Hogen Esch is not cited to support the taking of official notice, and teaches that transmitter circuits are tuned (or detuned) in the same manner as receiving circuits, see col. 1 lines 10-30. Therefore, it would have been obvious to one of ordinary skill in the art at the

time of the invention to have tuned the transmitter of the above system in the same manner as the receiver is suggested since this would be an alternative method of tuning to reach desired sensitivity in the communication channel.

The applicant argues that in the transmitter arts, it would substantially always be a goal to maximize transmission range. It is not clear how this pertains to the claims since not all claims require that the range be adjusted at all, and the claims do not limit the invention to minimizing the range or the sensitivity.

The In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the Markowitz receiver's range is made adjustable to provide flexibility of a variety of ranges as suggested by Murray. See col. 1 lines 60-65. The applicant argues that there needs to be evidence that the device of Markowitz is deficient. Nowhere in the statute or case law is explicit deficiency a requirement for an obviousness rejection. According to the applicant's arguement it would not be obvious to modify any reference unless the device in the primary reference were proven deficient which would lead to any

improvement over a 'functioning' device being on the face patentable, which is certainly not the case.

The applicant argues that the references do not adjust the operation range (sensitivity) in response to an interrogation signal. First it is noted that some claims for example claim 15, it is interpreted that the circuit is tuned to create a desired transmission range for the tag to transmit a signal in response to the interrogation signal. Explained another way is that the transmission signal being adjusted is the signal that is responsive to the interrogation signal, not that the interrogation signal causes the adjustment. In claim 22 for example, it is interpreted that the circuit characteristics are adjusted in response to the interrogation signal. Schuerman is cited for teaching the tuning is done in response from a signal from the interrogator. See col. 5 lines 22-53.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will

the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian A. Zimmerman whose telephone number is 571-272-3059. The examiner can normally be reached on 7 am to 4 pm E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on 571-272-7308. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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